

# Traumatic Brain Injury -- Outpatient Observation Stays

# 2003

## MASSACHUSETTS RESIDENTS

| INJURY CAUSE                         | INJURY INTENT      |                    |         |                   |                               | Total<br>Number | Percent<br>of Total | Rate per<br>100,000 <sup>2</sup> |
|--------------------------------------|--------------------|--------------------|---------|-------------------|-------------------------------|-----------------|---------------------|----------------------------------|
|                                      | Uninten-<br>tional | Intentional        |         | Undeter-<br>mined | Other &<br>Legal <sup>1</sup> |                 |                     |                                  |
|                                      |                    | Self-<br>Inflicted | Assault |                   |                               |                 |                     |                                  |
| Cut/pierce                           | 0                  | 0                  | 5       | 0                 | 0                             | 5               | 0.4                 | 0.1                              |
| Drowning/submersion                  | 1                  | 0                  | 0       | 0                 |                               | 1               | 0.1                 | --                               |
| Fall                                 | 464                | 0                  | 0       | 0                 |                               | 464             | 37.4                | 7.2                              |
| Fire/burn                            | 1                  | 0                  | 2       | 0                 |                               | 3               | 0.2                 | --                               |
| Firearms                             | 0                  | 0                  | 0       | 0                 | 0                             | 0               | 0.0                 | --                               |
| Machinery                            | 2                  |                    |         |                   |                               | 2               | 0.2                 | --                               |
| Natural/environmental                | 0                  | 0                  |         | 0                 |                               | 0               | 0.0                 | --                               |
| Overexertion                         | 0                  |                    |         |                   |                               | 0               | 0.0                 | --                               |
| Poisoning                            | 1                  | 0                  | 0       | 2                 | 0                             | 3               | 0.2                 | --                               |
| Struck by, against                   | 104                |                    | 51      |                   | 1                             | 156             | 12.6                | 2.4                              |
| Suffocation/hanging                  | 0                  | 0                  | 0       | 0                 |                               | 0               | 0.0                 | --                               |
| Transport Injuries:                  | 461                | 0                  | 0       | 0                 | 0                             | 461             | 37.1                | 7.2                              |
| <i>Motor vehicle traffic-related</i> | 394                | 0                  | 0       |                   |                               | 394             | 31.7                | 6.1                              |
| <i>Occupant</i>                      | 304                |                    |         |                   |                               | 304             | 24.5                | 4.7                              |
| <i>Motorcyclist</i>                  | 25                 |                    |         |                   |                               | 25              | 2.0                 | 0.4                              |
| <i>Pedal cyclist</i>                 | 8                  |                    |         |                   |                               | 8               | 0.6                 | 0.1                              |
| <i>Pedestrian</i>                    | 52                 |                    |         |                   |                               | 52              | 4.2                 | 0.8                              |
| <i>Other person</i>                  | 2                  |                    |         |                   |                               | 2               | 0.2                 | --                               |
| <i>Unspecified person</i>            | 3                  |                    |         |                   |                               | 3               | 0.2                 | --                               |
| <i>Pedal cyclist, other</i>          | 35                 |                    |         |                   |                               | 35              | 2.8                 | 0.5                              |
| <i>Pedestrian, other</i>             | 1                  |                    |         |                   |                               | 1               | 0.1                 | --                               |
| <i>Other transport</i>               | 31                 |                    |         |                   |                               | 31              | 2.5                 | 0.5                              |
| Other specified & classifiable       | 5                  | 0                  | 5       | 0                 | 0                             | 10              | 0.8                 | 0.2                              |
| Other specified, not classifiable    | 1                  | 0                  | 4       | 0                 | 0                             | 5               | 0.4                 | 0.1                              |
| Unspecified                          | 12                 | 0                  | 7       | 1                 | 0                             | 20              | 1.6                 | 0.3                              |
| Adverse effects <sup>3</sup>         |                    |                    |         |                   |                               | 3               | 0.2                 | --                               |
| No cause or intent provided          |                    |                    |         |                   |                               | 109             | 8.8                 | 1.7                              |
| TOTALS                               | 1,052              | 0                  | 74      | 3                 | 1                             | 1,242           | 100%                | 19.3                             |
| RATE BY INTENT/per 100,000           | 16.4               | --                 | 1.2     | --                | --                            |                 |                     |                                  |

Source: MA Outpatient Observation Stay Database, MA Division of Health Care Finance and Policy.

<sup>1</sup> Legal Intervention includes injuries resulting from police actions and operations of war.

<sup>2</sup> Rates are not calculated on counts of less than five. Rates that are based on counts less than twenty may be unstable.

<sup>3</sup> Adverse Effects can be related to medical and surgical care procedures, or to the use of therapeutic substances (including allergic reactions).

—This database contains cases admitted to a hospital bed for "observation," these cases are not included in the Massachusetts Hospital Discharge Database.

—An injury-related "observation" case is defined as any case having an ICD9-CM Nature of Injury Code of 800-999 assigned to any of the ICD9 diagnosis fields [cases having the following codes are excluded if no other valid ICD9-CM code is assigned: Certain Adverse Effects (995.0-995.4, 995.6, 995.7, 995.86, 995.89), Complications of Surgical & Medical Care (996-999), and certain Late Effects (909.3, 909.5)].

—Categories and groupings are based on a modified version of the CDC's "Recommended framework of E-code groupings for presenting injury mortality and morbidity data." This framework does not provide for intentionality for certain cause categories as indicated by gray shading.

—Injury subcategories are italicized.

—Analysis is based on a fiscal year (Oct 1, 2002– Sep 30, 2003).

—Only Massachusetts residents with valid zip codes (01001-02791, 05501, 05544) are included in this analysis.

—Injury observation cases subsequently dying in the hospital are excluded from this analysis.

—Population data used to calculate rates are based on 2003 population estimates generated by the US Census Bureau ([www.census.gov/popest/states/asrh/files/SC-EST2003-race6-AL\\_MO.csv](http://www.census.gov/popest/states/asrh/files/SC-EST2003-race6-AL_MO.csv)). Rates are not age-adjusted.

—Data were extracted and compiled by the Injury Surveillance Program, MDPH, January 2005.